

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A Method method for controlling ~~the~~an operating point of a transistor of a power amplifier for amplifying a time division multiplex (access) TDM(A)-~~signal~~signal comprising a plurality of data time slots and a plurality of null power time slots, the method comprising the steps of:

[-]detecting a deviation between a set operating point and an actual operating point of said transistor;

[-]detecting the occurrence of said null power time slots ~~or using the knowledge when they occur~~; and

[-]adjusting thea bias of thea gate/base of said transistor according to said deviation in order to re-establish said set operating point;

wherein these steps the detecting the deviation, the detecting the occurrence, and the adjusting the bias are carried out performed during at least two separate null power time slotslot slots of said TDM(A)-~~signal~~signal, and

wherein two of the at least two separate null power time slots occur before and after one of the data time slots, respectively.

2. (currently amended): The Method method according to claim 1, wherein the step of adjusting the bias optionally comprises the substep of:

— further comprising checking the adjustment of adjusting the bias.

3. (currently amended): The Method method according to claim 1, wherein the null power time slots to be used arise occur consecutively or not within said TDM(A)-~~signal~~non-consecutively.

4. (currently amended): The Method method according to claim 1, wherein the adjustment of adjusting the bias is carried out iteratively during several control loops.
5. (currently amended): The Method method according to claim 1, wherein the set operating point is adapted in response to the a temperature in the a surrounding of the transistor.
6. (currently amended): The Method method according to claim 1, wherein the bias means is a voltage applied to the gate/base voltage for driving the gate/base of the transistor.
7. (currently amended): The Method method according to claim 1, wherein the controlling of the operating point of the transistor is done only after the transistor has reached a steady state with respect to its a temperature surrounding the transistor after a switch-on of the power amplifier.
8. (currently amended): The Method method according to claim 7, wherein the controlling of the operating point is started after N, e. g. N = 3, three of the null Power power time slots have occurred.
9. (currently amended): A Computer computer program for a controlling unit of a Power power amplifier, comprising a code being adapted to carry out the method according to claim 1 when running on a microprocessor.
10. (currently amended): The Computer computer program according to claim 9, wherein the code is stored on a computer-readable storage medium.
11. (currently amended): A Power power amplifier for amplifying a time division multiplex (access) TDM(A)-signalsignal in a TDM(A) system, in particular in a Global System for Mobile Communications GSM the TDM(A)-signal comprising a plurality of data time slots and a plurality of null power time slots, the power amplifier comprising
a transistor for amplifying said TDM(A)-signalsignal;

a shunt being connected in series to the a drain-source path or a collector-emitter path of said transistor for providing a measurement voltage, the a constant component of which representing the actual an operating point of said transistor; and

a controlling unit for detecting a deviation between a set operating point and said actual operating point, for detecting the occurrence of the null power time slots within said TDM(A)-signalssignal and for adjusting the a bias of the a gate/base of said transistor according to said deviation in order to re-establish said set operating point;

wherein the controlling unit is embodied to carry out the detecting the deviation, the detecting the occurrence and the adjusting the bias are performed steps during at least two separate ones null power time slots of said detected null power time slots, and

wherein two of the at least two separate null power time slots occur before and after one of the data time slots, respectively.

12. (currently amended): A Power power amplifier according to claim 11, wherein the controlling unit is embodied as a digital signal processor.

13. (currently amended): A Transmitter transmitter, in particular a radio transmitter, comprising a the power amplifier according to claim 11.

14. (currently amended): A Transmitter transmitter station, in particular a radio transmitting base station, comprising at least one transmitter according to claim 13.

15. (currently amended): A telecommunications system, in particular a mobile radio system, comprising at least one power amplifier according to claim 11.